

This listing of the claims will replace all prior versions, and listings of claims in the application.

In the Claims

1. (Previously Presented) A system that provides a user of a single analog line multiple uses of said line comprising;

a modem connected to a fixed logic system which multiplexes or demultiplexes data;

said modem compressing a signal traveling through said analog line;

said modem providing simultaneous transmission of two, or more, speech or data calls.

2. (Original) The system of claim 1 wherein said modem is programmable.

3. (Previously Presented) The system of claim 1 wherein said modem incorporates Handel-C.

4. (Previously Presented) The system of claim 1 wherein said system is reprogrammed as needed.

5. (Previously Presented) The system of claim 1 wherein said modem is downloaded on analog lines, cable, satellite and fiber lines.

6. (Previously Presented) The system of claim 1 wherein said simultaneous transmission is accomplished by compressing conventional analog voice traffic to occupy less bandwidth.

7. (Previously Presented) The system of claim 1 further comprising a speech compression algorithm requiring between about 5.6 to 6.4 kbps of bandwidth.

8. (Previously Presented) The system of claim 1 wherein said modem further comprises field programmable gate array chips.

9. (Previously Presented) The system of claim 1 wherein said system is connected to a copper line by a COTS modem.

10. (Previously Presented) The system of claim 1 wherein said system comprises two modems, one at each end of an analog line;

a first modem compresses and multiplexes data at a source end of said line;

and a second modem demultiplexes and expands data at an exchange end of a copper line.